

**IN THE SPECIFICATION**

Amend the specification as follows.

Delete the paragraphs spanning page 8, line 10 through page 9, linen 2, and insert the following therefor:

Figure 2 shows differential expression of mRNA of the secretin receptor in control and CF lung regions. Ct refers to the fractional PCR cycle number at which a PCR product is first detected as further described herein.

Figure 3 shows mRNA expression of GAPDH in control and lung CF regions. Ct is defined above.

Figure 4 shows differential expression of mRNA of the secretin receptor in control and CF lung regions from a sample of 16 control and 25 CF tissue donors. Ct is defined above.

Figure 5 shows that secretin stimulates ionic movement in the non-CF tertiary bronchus. Time points "a", "b" and "c" are described further in Example 2.

Figure 6 shows that secretin stimulates non-CTFR dependent ionic movement in confluent monolayers of primary human tertiary bronchial epithelial cells derived from non-CF donors. Time points "a" and "b" are further described in Example 2.

Figure 7 shows that secretin stimulates ionic movement in the human CF tertiary bronchus. Time points "a" and "b" are described in Example 3.

Figure 8 shows the effect of secretin on chloride ion efflux in primary human tertiary bronchial epithelial cells derived from non CF donors. A detailed description of the samples is provided in Example 4.

Figure 9 shows the levels of NeuroD mRNA in tertiary bronchus and lung parenchyma of CF patients. Ct is defined above.

Delete the paragraph spanning page 28, line 17 to page 29, line 2 and insert the following therefor:

Functional effects of the secretin receptor were probed in epithelial cells derived from the human tertiary bronchus. In brief, tertiary bronchial epithelial were isolated by overnight protease digestion and then cultured until confluency on Snapwell (Costar) permeable supports. The supports were mounted in a modified Ussing chamber, and both luminal and basolateral membranes were bathed in oxygenated Krebs extracellular solution. The cells were voltage clamped to zero to allow changes in short circuit current  $I_{sc}$  in response to secretin to be measured. As previously described, 10  $\mu$ M amiloride was initially added to the luminal membrane (Figure 6, point a) followed by the addition of 100 nM secretin to the luminal membrane (Figure 6, point b). A time matched, amiloride-treated control is denoted by the thin trace. Consistent with observations in the tertiary bronchus, secretin stimulated ionic movement in a manner

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consistent with the movement of a negatively charged ion ( $\text{Cl}^-$  and / or  $\text{HCO}_3^-$ ).

Furthermore, addition of 500  $\mu\text{M}$  glibenclamide, a recognised inhibitor of the CFTR failed to suppress secretin mediated ionic movement, suggestive that a similar ionic movement would be observed in CF tertiary bronchial epithelial cells.

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**IN THE FIGURES**

Insert the attached Formal Drawings in place of the originally-filed figures.